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EXAMINER

CHEN, SHIN HON

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/004,019

Applicant(s)

TOH ET AL.

Examiner

Shin-Hon Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 45-57 is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. Claims 1-44 are rejected.

#### ***Allowable Subject Matter***

2. The following is a statement of reasons for the indication of allowable subject matter:  
Claims 45-57 are allowable. The closest prior art of record discloses generating escrow key for sender when the recipient's public key is not present. However, the prior art of record does not explicitly disclose means for generating an escrow key for encrypting the document if the means for searching does not return a public key for the recipient; means for requesting the recipient's public key from the recipient; means for storing said document in escrow until receipt of the recipient's public key; means for unencrypting the document using an escrow decryption key; and means for re-encrypting the document using the recipient's encryption key prior to sending the document to the recipient in light of other features disclosed in independent claim 45 and the specification.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

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art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim limitation discloses that the unencryption escrow key for unlocking said escrow key is not made available to said recipient when the document is encrypted with the escrow encryption key. However, the specification ([0096] pages 33-34: the OC200 or escrow manager could transmit the escrow decryption key as part of the delivery to the receiving system 300). Therefore, the examiner will examine the claim as the unencryption escrow key is made available to the recipient.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 29-44 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: Certain portions of the claim sentences stop abruptly which the examiner has difficulty understanding. Therefore, claim 29 is rejected based on the limitations set forth in claim 1.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the

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subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-4, 6-16, 21-36, 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everingham US (6,327,611) in view of Walker et al. U.S. Pub. No. 20020023213 (hereinafter Walker).

9. As per claim 1, 29, and 30, Everingham discloses a method for delivering a document from a sender to a next stage on a routing list comprising the steps of: receiving an indication that the sender desires to deliver a document to a next stage on a routing list for the document (Everingham: column 5 lines 31-36) and identifying a recipient from the next stage on the routing list (Everingham: column 5 lines 34-36). Everingham does not explicitly disclose setting a key for encrypting the document equal to a public key of the recipient; providing an escrow key not equal to the recipient's public key, and setting the key equal to the escrow encryption key if said recipient's public key cannot be located; encrypting the document prior to sending said document using the key, and providing the encrypted document to the recipient. However, Walker discloses providing recipient's public key to the sender and if the public key cannot be retrieved, the server will generate escrow key pair for the sender and the escrow key pair is not equal to the sender's private key, wherein an escrow unencryption key for unlocking said escrow encryption key is made available to said recipient (Walker: [0041]). It would have been obvious to one having ordinary skill in the art to encrypt a message using recipient's public key prior to sending the message to a recipient. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Walker within the

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system of Everingham because it allows the sender to encrypt data regardless whether there's existing public key for the recipient.

10. As per claim 2, Everingham as modified discloses the method of claim 1 further comprising defining and storing the routing list before an originating sender indicates a desire to deliver the document to the routing list (Col 4, Lines 12-19)

11. As per claim 3, Everingham as modified discloses the method of claim 1. Everingham as modified further discloses the method comprising receiving the routing list and an indication that the user desires to deliver the document to the list and storing the routing list (Everingham: column 5 lines 31-42).

12. As per claim 4 and 30, Everingham as modified further discloses sending the message encryption key to the sender (Walker: [0041]).

13. As per claim 6, Everingham as modified discloses the method of claim 4. Everingham as modified further discloses the sender encrypting the document using the message encryption key; and the sender delivering the encrypted document to the recipient (Walker: [0041]).

14. As per claim 7, Everingham as modified discloses the method of claim 1 further comprising the sender delivering the document to the recipient. (Everingham: column 5, lines 43-47; Walker: [0041]).

15. As per claim 8, Everingham as modified discloses the method of claim 1. Everingham as modified further discloses wherein the routing list is identified by a routing list identifier; and the step of receiving an indication that the sender desires to deliver a document to a next stage on the routing list includes receiving the routing list identifier (Everingham: column 5 , lines 33-39).

16. As per claim 9, Everingham as modified discloses the method of claim 8. Everingham as modified further discloses wherein the routing list identifier includes an email address of said routing list (Everingham: column 4, lines 1-11).

17. As per claim 10: Everingham discloses the method of claim 8 wherein the routing list identifier an address at a domain name of a web page for routing lists (Everingham: column 4, lines 1-11).

18. As per claim 11, Everingham as modified discloses the method of claim 1. Everingham as modified further discloses wherein the next stage in the routing list comprises a group of recipients; and the step of identifying a recipient from the next stage comprises identifying at least one of the recipients group (Everingham: column 6 lines 57-64).

19. As per claim 12 and 32, Everingham as modified discloses the method of claim 1. Everingham as modified further discloses wherein the step of receiving an indication that the sender desires to deliver a document to a next stage on the routing list comprises: receiving a

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query from the sender for an identity of a recipient from the next stage on the routing list (Everingham: column 6, lines 57-64).

20. As per claim 13, Everingham as modified discloses the method of claim 12. Everingham as modified further discloses the method comprising: tracking a current recipient of the document from the routing list; and in response to the query (Everingham: column 4 lines 34-40); returning an error message, if the routing list cannot be located or the querying sender is not the current recipient (Everingham: column 4 lines 40-55); and returning the identity of at least one recipient from the next stage of the routing list, if the querying sender is the current recipient (Everingham: column 5 lines 43-47).

21. As per claims 14 and 34, Everingham as modified discloses the method of claim 1. Everingham as modified further discloses the method comprising tracking a current recipient of the document from the routing list (Everingham: column 5 line 66 - column 6 line 7).

22. As per claim 15, Everingham as modified discloses the method of claim 14. Everingham as modified further discloses the method comprising receiving confirmation that the recipient has received the document; and updating the current recipient of the document to reflect the received confirmation (Everingham: column 5 line 45 and column 5 line 66 - column 6 line 7).



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23. As per claims 16 and 35, Everingham as modified discloses the method of claim 1.

Everingham further discloses wherein the routing list includes rules (Everingham: column 3 lines 62-63).

24. As per claims 21 and 41, Everingham as modified discloses the method of claim 1.

Everingham as modified further discloses wherein the step of receiving an indication that a sender desires to deliver a document to the next stage on a routing list comprises receiving a form containing rules for the routing list (Everingham: column 4 lines 12-30 and column 5 lines 43-60: the control portion contain rules information along with the routing list).

25. As per claims 22 and 42, Everingham as modified discloses the method of claim 1.

Everingham as modified further discloses wherein the step of receiving an indication that the sender desires to deliver a document to a next stage on a routing list comprises receiving a routing parameter for the routing list (Everingham: column 5 lines 33-39).

26. As per claims 23 and 40, Everingham as modified discloses the method of claim 1.

Everingham as modified further discloses wherein the step of receiving an indication that a sender desires to deliver a document to a next stage on a routing list for the document comprises receiving the document along with an indication (Everingham: column 5 lines 31-42).

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27. As per claim 24, Everingham as modified discloses the method of claim 23. Everingham as modified further discloses the method comprising delivering the document to the recipient (Everingham: column 5 lines 43-47).

28. As per claim 25, Everingham as modified discloses the method of claim 23. Everingham as modified further discloses the method comprising delivering the document in read-only mode to the recipient (Everingham: column 6 lines 22-27).

29. As per claim 26, Everingham as modified discloses the method of claim 23. Everingham as modified further discloses encrypting the document using the message encryption key before delivering the document to the recipient (Walker: [0041]).

30. As per claim 27 and 43, Everingham as modified discloses the method of claim 1. Everingham as modified further discloses the method comprising authenticating the sender's public key, establishing a secure connection with the sender and receiving the document from the sender via the first secure connection (Everingham: [0004]: authenticating the sender using the sender's public key when the message is encrypted by sender's private key).

31. As per claim 28, 44, and 57 Everingham as modified discloses the method of claim 27. Everingham as modified further discloses authenticating the recipient using the recipient's public key; establishing a second secure connection with the recipient; and transmitting the document to the recipient via the second secure connection (Walker: [0041]).

32. As per claim 31, Everingham as modified discloses the computer program product of claim 29 wherein the routing list is identified by an email address (Everingham: column 4 lines 1-11); and the step of receiving an indication includes receiving the email address (Everingham: column 5 lines 33-39).

33. As per claim 32, Everingham as modified discloses the computer product program of claim 29. Everingham as modified further discloses wherein the routing list is identified by an address at a domain name for routing lists (Everingham: column 4 lines 1-11); and the step of receiving an indication includes receiving the address (Everingham: column 5 lines 33-39).

34. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Everingham in view of Walker and further in view of Bouchard et al. U.S. Pub. No. 20020091928 (hereinafter Bouchard).

35. As per claim 5, Everingham as modified discloses the method of claim 4. Everingham as modified does not explicitly disclose wherein the step of sending the key to the sender comprises: sending to the sender a digital certificate containing the recipient's public key. However, Bouchard discloses a server locating and retrieving a recipient's public key through digital certificate (Bouchard: [0049]-[0050]). It would have been obvious to send the digital certificate to the sender so that the sender can retrieve the public key for encryption because they are analogous art. Therefore, it would have been obvious to one having ordinary skill in the art at

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the time of applicant's invention to combine the teachings of Bouchard within the combination of Everingham-Walker because transmitting digital certificate to send public key is well known in the art.

36. Claims 17-20, and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everingham in view of Walker and further in view of Geiger et al. US (6,073,142).

37. As per claims 17 and 36, Everingham as modified discloses some rules being applied to the routed document and the routing list but the combination of Everingham and Walker doesn't show the rules encapsulated in forms. However Geiger discloses a system for document routing in a networked environment where the document reviewing rules are encapsulated into a form (Geiger: column 15 lines 55-67 and FIG. 8). Therefore it would be obvious to one ordinary skilled in the art at the time the invention was made to modify the combination of Everingham-Walker with the teachings of Geiger to encapsulate the rules into a form for the rules engine. One would be motivated to do so in order to enable the system to provide the ability to define business rules and distribution control over various types of data objects.

38. As per claims 18 and 37, Everingham as modified discloses some rules being applied to the routed document and the routing list but the combination of Everingham-Walker does not explicitly disclose the rules embodying business processes. However Geiger discloses a system for document routing in a networked environment where the document reviewing rules are embodied in a business process (Geiger: column 12 lines 53-66 and column 13 lines 15-25).

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Therefore it would be obvious to one ordinary skilled in the art at the time the invention was made to modify the combination of Everingham-Walker with the teachings of Geiger to embody a business process into the rules. One would be motivated to do so in order to enable the system to provide the ability to define business rules and to control distribution over various types of data objects in light of business communication policy (Geiger: column 3 lines 1-20).

39. As per claims 19 and 38, Everingham as modified discloses the routing list as being an ordered group of email addresses recipients but the combination of Everingham-Walker does not explicitly disclose the routing list including conditional recipients. However Geiger discloses a system for document routing in a networked environment where the document the routing list includes a conditional recipient (Geiger: column 22 lines 48-57). Therefore it would be obvious to one ordinary skilled in the art at the time the invention was made to modify the combination of Everingham-Walker with the teachings of Geiger to include a conditional recipients in the routing list. One would be motivated to do so in order to enable the system to provide review of messages according to the message proprieties and content and to control distribution over various types of data objects in light of business communication policy (Geiger: column 3 lines 1-20).

40. As per claims 20 and 39, the combination of Everingham and Kara does not explicitly disclose the step of receiving an indication that the sender desires to deliver the document comprising receiving a parameter from the sender, wherein the recipient depends on the parameter received. However Geiger discloses a system for document routing in a networked

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environment where the document the routing list includes a conditional recipient (Col 10, Lines 54-62). Therefore it would been obvious to one ordinary skilled in the art at the time the invention was made to modify the combination of Everingham-Walker with the teachings of Geiger to include a conditional recipients in the routing list. One would be motivated to do so in order to enable the system to provide review of messages according to the message proprieties and content and to control distribution over various types of data objects in light of business communication policy (Col 3, Lines 1-20).

### *Response to Arguments*

41. Applicant's arguments filed on 6/6/06 have been fully considered but they are not persuasive.

Regarding applicant's remarks, applicant argues that the escrow key disclosed by Walker is equal to the public key of recipient. However, Walker discloses that the locking key is provided when the recipient's public key is not present. Therefore, the key issued by the server is not equal to the recipient public key (Walker: [0041]: the locking keys) and applicant's argument is respectfully traversed.

Furthermore, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge

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gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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